



# Decreasing Pressure Injury Risk Through Increased Awareness of Inherent Pressure Injury Risks Associated with Patient Diagnoses

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## Introduction

Sheltering Arms Hospital is an acute rehabilitation facility comprised of 2 inpatient hospitals with a total of 68 beds. Inconsistencies in care with regard to pressure injury prevention had been identified. The inconsistencies were related to staff turnover and a lack of experience with our patient population and its inherent pressure injury risk. Based on interviews with clinical staff, LPN's, RN's, PCT's and therapists, a "disconnect" was noted in their association between admitting diagnoses and the consistent pressure injury risks associated with those diagnoses. Some of the most common diagnoses seen at our hospitals are: Diabetes, CVA, Brain Injury/AMS, Hip/Knee/Back Surgery and Lower extremity edema

## Materials & Methods

To create a greater understanding of pressure injury risk than therefore immediate implementation of proper interventions an educational tool was developed. The tool focuses on the areas of risk as they relate to the clinical manifestations associated with specific diagnoses and correlated appropriate interventions that decrease the risk of pressure injury development.

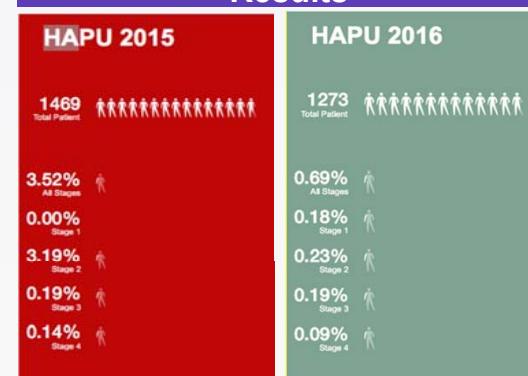
Beginning in April 2016 educational sessions were conducted for 200 clinical staff from both hospitals on the content of the educational tool.

## Materials and Methods

### UNDERSTANDING THE LINK BETWEEN DIAGNOSES AND PRESSURE INJURY RISK

| Diabetes   | CVA  | Brain Injury/ AMS   | Hip/Knee/Back Surgery  | Lower Extremity Edema  |
|--|--|---|--|--|
| <b>Problem:</b><br><b>1.Poor circulation to LE</b><br><b>2.Neuropathy=decreased sensation to feet. Increased risk of undetected injury.</b>  | <b>Problem:</b><br><b>1. Hemiparesis = cannot feel pressure, pain</b><br><b>2. Weakness to affected side=cannot turn self</b><br><b>3. Incontinence = risk MASD=weakens skin tolerance</b><br><b>4.Brace/AFO/splint=potential skin alteration</b><br><b>5. Tube Feeding: = Increased HOB elevation =shearing forces on skin</b>  | <b>Problem:</b><br><b>1. Weakness = cannot T&amp;R self</b><br><b>2. Poor short term recall=cannot remember to T&amp;R self</b><br><b>3. Pain: = limits mobility</b><br><b>4.Brace/AFO/Splint= Potential skin alteration</b><br><b>5.Tube Feeding=increased HOB elevation</b><br><b>6.Incontinence=MASD</b>   | <b>Problem:</b><br><b>1.Weakness=cannot T&amp;R self</b><br><b>2.Pain= limits mobility</b>   | <b>Problem:</b><br><b>1. Heavy legs=poor mobility</b><br><b>2. Poor oxygenation to skin = increased injury risk</b><br><b>3.TED hose<sup>3</sup>/Tubigrip = risk of skin injury</b><br><b>4. Shortness of breath</b>   |
| <b>Interventions:</b><br><b>1.2. Heel floatation – Prevalon boots or 1 pillow lengthwise under each leg knee to ankle<sup>1</sup></b><br><b>1.2. Shoes to be worn at all times.</b><br><b>1.2. Patient education on foot care<sup>1</sup></b><br><b>1.2. Daily foot inspection</b> | <b>Interventions:</b><br><b>1.2. Heel floatation: Prevalon boots or pillows</b><br><b>1.2. T&amp;R q2h in bed; q1h in chair; Cue q15" to reposition self in chair.<sup>1</sup></b><br><b>1.2. Minimize HOB elevation to 30' or less unless contraindicated<sup>1</sup></b><br><b>3. Barrier wipes/cream<sup>1</sup></b><br><b>3. Frequent incontinence care</b><br><b>4. Monitor for fit &amp; edema. Remove &amp; inspect skin QS</b><br><b>5. HOB 45' at all times unless contraindicated.<sup>2</sup></b><br><b>Elevate FOB slightly to decrease sliding.<sup>2</sup></b><br><b>PEG Care daily monitor for bumper ulceration.</b> | <b>Interventions:</b><br><b>1.2.3. Heel floatation: Prevalon boots or pillows</b><br><b>1.2.3. T&amp;R q2h in bed; q1h in chair; cue q15" to reposition self in chair</b><br><b>1.2.3. Minimize HOB elevation to 30' or less unless contraindicated</b><br><b>4. Monitor for fit and edema. Remove &amp; inspect skin QS</b><br><b>5. HOB 45' at all times unless contraindicated.</b><br><b>Elevate FOB slightly to decrease sliding.</b><br><b>PEG Care daily</b><br><b>6. Barrier wipes/cream</b><br><b>Frequent incontinence care</b> | <b>Interventions:</b><br><b>1.2. T&amp;R q2h in bed; q1h in chair; cue q15" to reposition self in chair.</b><br><b>1.2. Heel floatation: Prevalon Boots or pillows</b><br><b>1.2. Minimize HOB elevation to 30' or less unless contraindicated</b> | <b>Interventions:</b><br><b>1.2. Heel floatation: Prevalon boots or pillows</b><br><b>3. Monitor for fit/skin assessment:</b><br><b>a) On in AM; Off at HS</b><br><b>b) Be sure Tubigrip is on from base of toes to below knee;</b><br><b>c)Be sure TEDS/Tubigrip are smooth and not digging into skin folds.</b><br><b>4. Minimize HOB elevation to 30' or less unless contraindicated.</b><br><b>Document as increased pressure ulcer risk if patient cannot tolerate &lt;30' HOB elevation.</b> |

## Results



## Conclusions

1. Clinicians gained increased awareness of how clinical manifestations of diagnoses equates to pressure injury risk.
2. Enhanced patient compliance with their plan of care due to increased patient education
3. Decreased hospital acquired pressure injuries

## References

1. WOCN Guideline for Prevention and Management of Pressure Ulcers, 2010, pp.14-22
2. Head of Bed Elevation in Critically Ill Patients: A Review: Critical Care Nurse Vol 33, No. 3, June 2013
3. Pressure ulcers of the popliteal fossae caused by thromboembolic deterrent stockings (TEDS): *J Med Sci*. 2011 June; 180 (2):601-2. doi: 10.1007/s11845-009-038407. Epub 2009 Jul25.